



# The Chronical™

## Standard and Brewmaster Edition Comparison Guide

With the introduction of our new line of Brewmaster Edition Chronical Fermenters, we are compiling this guide to highlight new features, compare and contrast equipment selections, and draw parallels between our standard Chronical line. This guide should boost your comfort level with utilizing the new features included in the Brewmaster line, but also solidify your purchase decision so that you ultimately buy the vessel that fits your own individual needs and budget.

### Valves

At first glance, most consumers immediately notice that we have opted to swap the standard line's tri-clamp (TC) ball valve for a TC butterfly valve. While both valves excel at liquid tight connections and ease of use, we opted for sanitary butterfly valves on the Brewmaster line for their zero dead-space design. Dead space inside a valve can sometimes harbor yeast or bacteria that can ultimately affect the quality of the fermenting beer in the absence of a strict cleaning regimen. Butterfly valves can be easily sanitized through regular brewery PBW/Starsan cleaning preparation without disassembling the valve body. This saves time and provides an additional level of safety against infection.

The downside to butterfly valves is that they are very expensive to manufacture, and require an abundance of precision machining to work effectively. With regular cleaning, the ball valves on our standard line will provide many years of trouble free use, yet commercial cellar installations are typically outfitted with butterfly valves for this one key feature. Our commercial duty in-house designed butterfly valves include a stainless pull trigger, and can be easily fitted to any 1.5" TC connection.

Lastly, we have found that pro-users check gravity and sample their fermenting beer often, which is why we have added a small 3/8" ball valve for this very purpose. The sampling valve is situated to the right of the main valves and sits well above the yeast or trub layer to provide the user with a clean sample of their precious concoction. Our standard line does not include a sampling valve.

### Lid

The next most obvious change to the exterior of the Chronical is the large 3" ferule sanitary welded to the top of the included domed lid. While our standard line includes a 1.5" ferule, the additional size provided by the 3" opening allows for a few unique uses.

The first being the attachment of a clean-in-place (CIP) spray ball, which when hooked up to a high pressure pump can evenly distribute caustics such as PBW to easily clean the vessel post-fermentation. This facilitates fewer man hours wasted on manually cleaning the fermenter, enabling faster vessel turn times, and intermingling directly with an existing CIP installation.

Secondarily, it allows users to utilize our stainless steel blow-off cane, which in turn makes rigging a floor sitting blow-off assembly quick, sanitary, and easy.

Lastly, the larger opening allows users to easily add ingredients to fermenting beers without breaking the lid seal and losing the blanket of CO<sub>2</sub> which rests on top of the beer post primary fermentation. Users can easily dry hop, add fruit, or adjuncts such as Belgian Candi Syrup.

The 3" ferule will also retain all of the standard series' abilities including pressurized transfers, standard barb/tubing blow-off assembly. For users that have an abundance of 1.5" TC accessories, we will be offering a 3" to 1/5" TC reducer to support legacy and standard series Chronical equipment.

### **Chiller Coil and Jacket**

While not immediately apparent from the outside of the fermenter, we have responded to user feedback and vertically mounted the chill coil inside the main body of the conical in our Brewmaster Edition. This new design efficiency enables better fluid contact with the fermenting beer, and places the coil directly in the center mass of the vessel. Furthermore, it allows users to retain the use of their domed lid while operating the unit alongside an FTSS. The domed lid provides additional headspace and allows users the ability to add TC fittings to the unit's lid mounted ferule.

Users should keep in mind that the Brewmaster was designed primarily to control temps with the included chill coil, while our standard series allows users to place the unit inside a temperature controlled space, such as a refrigerator, without the need for an FTSS kit. If an FTSS kit is desired, our standard series utilizes a flat lid, and lid mounted chill coil.

Lastly, because we understand that pro users want flexibility, we included the coil and exterior neoprene jacket but purposefully excluded the pump and controller in case the vessel will ultimately be part of a larger glycol system or intermingled with existing consumer owned equipment. However, we will be offering a completion kit to Brewmaster users with just the pump and controller if a complete FTSS solution is needed.

Conversely, our standard series does not include any temperature control equipment included in the base price of the fermenter for cost competitiveness. An FTSS kit can be purchased separately with all of the parts necessary to maintain temperatures within the fermenter.

In the coming months we will be introducing several new FTSS options for both heating and cooling our Brewmaster and Standard Edition Chronicles. We are designing the FTSS line to adapt to virtually any fermentation temperature stabilization needs, and come together seamlessly with the equipment of both the Standard and Brewmaster Editions.

### **User-Installed Upgrade Options**

One of the key tenants ingrained in our DNA at SS Brewing Technologies is to never leave a fellow brewer behind, which is why we will be offering butterfly valves, sampling valves, chill coil retrofit options, and 3" ferule lids as add-on user-installed accessories. We have done this so that if a legacy user values one particular aspect of our Brewmaster series above another they can simply upgrade just a element instead of purchasing another complete fermenter. This provides a cost effective way for users to begin with our standard line, then upgrade as they grow their brewing skills and need a more advanced equipment configuration.